

Course: CHEM 462, Green Chemistry
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Brief course description:

At a time when human beings are beginning to realize that their actions have had a definite, irreversible, and detrimental impact on their environment with consequences such as global warming or loss of biodiversity, we need, as chemists, to ask ourselves a simple question: 'What can we do to help the planet, to help humanity?'. An active part of research in chemistry has pursued the goal of answering that question, leading to a domain of chemistry called 'green chemistry'.

This course was designed as a multidisciplinary hub to offer students the largest possible view of the challenges faced by green chemistry. Students are expected in this class to demonstrate leadership, motivation, creativity, and energy. The grading scheme and activities were designed to allow peer reviewing, group work, debates, discussion, and writing to be at the core of the learning experience.

Method of Delivery:

Efforts have been made in every aspect of the course, from the lectures, to the activities and assessments to ensure the experience of the course will be intact and even enhanced:

- Important concepts will be covered in engaging short videos (15-20 min) that students will watch on their own timeline (3 per week on average).
- Readings will be offered in order to deepen the concepts covered in videos. Students will have to present some of this materials in the form of talking points to the class. Students will be paired for this exercise, in order to get some "off-lecture-classroom" experience and get to know each other a bit more.
- Live presentations, moderated discussions and tutorials will complement the delivery (1.5 h per week on average). These will be recorded for students who could not log on to the session.
- A few times during the term, a guest speaker will deliver a 1.5h zoom lecture presentation on a topic he/she is an expert on. These will be recorded for students who could not log on to the session.
- This material will be complemented by short modules to practice soft skills, including how to give a powerful presentation, how the work on a review et build a bibliography etc.
- The course also includes "traditional components" of chem 462, such as the redaction of a literature review on a Green Chemistry topic selected by the student, with a peer review component, a written and an oral part.

All materials and resources for this course will be made available on myCourses. A forum will be there as well to stimulate further discussion. All questions should be addressed to audrey.moores@mcgill.ca.

Evaluation Scheme:

- Discussion talking points: 10%

- Engagement and participation: 10%
- Review:
 - Peer evaluation of review: 15%
 - Presentation of review: 25%
 - Written review: 25%
- Take home exam: 15%